

No. 6. — *Bibliography to accompany "Selections from Embryological Monographs" compiled by ALEXANDER AGASSIZ, WALTER FAXON, and E. L. MARK.*

I.

CRUSTACEA.

BY WALTER FAXON.

[It is proposed to issue in the Memoirs of the Museum a "Selection from Embryological Monographs," which will give to the student, in an easily accessible form, a more or less complete iconography of the embryology of each important group of the animal kingdom. This selection is not intended to be a handbook, but rather an atlas to accompany any general work on the subject.

The plates will be issued in parts, as fast as practicable, each part covering a somewhat limited field. The parts devoted to Echinoderms, Acalephs, and Polyps are well advanced, and a beginning has been made for the Crustacea. Occasional appendices may be published, to prevent the plates from becoming antiquated.

The quarto illustrations will be accompanied by a carefully prepared explanation, and by a bibliography, in octavo, to be made as complete as possible. Although a large part of this bibliographical literature may be found in the general works of Kölliker, Balbiani, and Balfour, and in some of the more recent special monographs, a fuller list on special subjects, comprising the scattered references now accessible only with much cost of time and labor, will be convenient for students.

The present Bulletin contains the first instalment of this bibliography. It will be followed at an early date by similar lists for the Echinoderms, the Acalephs, the Polyps, and the Fishes.

ALEXANDER AGASSIZ.

THE embryological literature of the Arthropod groups *incertæ sedis*, viz. *Xiphosura*, *Trilobita*, and *Pycnogonida*, will be found at the end of this list. An asterisk (*) before a title denotes that the work cited has not been seen by me.

December 3, 1881.

W. F.]

Agassiz, Alexander.

[On the Development of the *Porcellanidæ*.] *Proc. Boston Soc. Nat. Hist.*, X. p. 222. Oct. 18, 1865.

(*Zoëa of Porcellana (Polyonyx) macrocheles* recorded from Newport, R. I.)

Instinct? in Hermit Crabs. *Amer. Journ. Sci. & Arts* [3], X. pp. 290, 291. Oct. 1875.

(Habits of young.)

Agassiz, Louis.

Twelve Lectures on Comparative Embryology, delivered before the Lowell Institute, in Boston, December and January, 1848-49. Boston, 1849. 104 pp.

(Eggs of *Pinnotheres*, p. 67, Pl. XXII. Development of *Palæmon*, pp. 67, 68, Pl. III. *Cumæ* the young of *Palæmon*, *Hippolyte*, and *Mysis*, p. 68.)

Zoölogical Notes from the Correspondence of Prof. Agassiz. *Amer. Journ. Sci. & Arts* [2], XIII. pp. 425, 426, 1852; XXII. pp. 285, 286, 1856.

(Cumæ the young of *Crangon*, *Palaemon*, and *Hippolyte*.)

Allman [George James].

On the Development of *Notodelphys*, Allm., a new Genus of *Entomostraca*. *Rep. Brit. Assoc. Adv. Sci. for 1847*, p. 74. 1848.

Anderson, John.

On the Anatomy of *Sacculina*, with a Description of the Species. *Ann. Mag. Nat. Hist.* [3], IX. pp. 12-19, Pl. I. 1862.

(Larva, pp. 13, 14, fig. 1.)

Aurivillius, P. O. Christopher.

On a new Genus and Species of *Harpacticida*. *Bihang till K. Svenska Vetensk.-Akad. Handl.*, V. No. 18. 1879. 14 pp., 4 pl.

(*Balaenophilus unisetus*. Development, pp. 10-15, Pl. III., IV.)

**Balaenophilus unisetus* nov. Gen. et Sp. Ett Bidrag till Kännedomen om Harpacticidernas Utvecklingshistoria och Systematik. Stockholm, 1879. 26 pp., 4 pl. (Akadem. Afhandl.)

Baird, W.

The Natural History of the British *Entomostraca*. London, 1850. 364 pp., 36 pl.

Previously in *Mag. Zool. Bot.*, I. pp. 35-41, 309-333, 514-526, Pl. VIII.-X., XVI., 1837; II. pp. 132-144, 400-412, Pl. V., 1838. *Ann. Nat. Hist.*, I. pp. 245-256, Pl. IX., 1838. *Ann. Mag. Nat. Hist.*, XI. pp. 81-95, Pl. II., III., 1843.

(Young stages, *passim*.)

Balbani [G.].

Observations relatives à une Note récente de M. Gerbe, sur la Constitution et le Développement de l'Œuf ovarien des Sacculines. *Comptes Rendus de l'Acad. des Sci., Paris*, LXVIII. pp. 615-618. 1869.

Sur la Constitution et le Mode de Formation de l'Œuf des Sacculines. *Comptes Rendus de l'Acad. des Sci., Paris*, LXIX. pp. 1320-1324. 1869. *Ann. Mag. Nat. Hist.* [4], V. pp. 303-306. 1870.

Sur la Constitution et le Mode de Formation de l'Œuf des Sacculines. Remarques concernant une Note récente de M. Ed. Van Beneden. *Comptes Rendus de l'Acad. des Sci., Paris*, LXIX. pp. 1376-1379. 1869.

Balfour, Francis M.

A Treatise on Comparative Embryology. Vol. I. Chapter XVIII. Crustacea. Pp. 380-443. London, 1880.

(General work.)

Bate, C. Spence.

Notes on Crustacea. *Ann. Mag. Nat. Hist.* [2], VI. pp. 109-111, Pl. VII. 1850.

(On the mode of escape of *Pagurus* larva from the egg, p. 111.)

On the Development of the *Cirripedia*. *Ann. Mag. Nat. Hist.* [2], VIII. pp. 324-332, Pl. VI.-VIII. 1851.

On the British *Edriophthalmia*. Part I. The *Amphipoda*. *Rep. Brit. Assoc. Adv. Sci. for 1855*. 1856.

(On the development of the young, pp. 55, 56.)

On the British *Diastylidae*. *Ann. Mag. Nat. Hist.* [2], XVII. pp. 449-465, Pl. XIII.-XV. 1856.

(On the development, p. 463. Zoëa of *Hippolyte varians*, pp. 461, 462, Pl. XV. fig. 8.)

On the Development of *Carcinus Mænas*. *Proc. Roy. Soc. London*, VIII. pp. 544-546. 1857.

(Abstract of paper given in full in *Phil. Trans. Roy. Soc. London*, CXLVIII.)

On the Genus *Cuma*. *Ann. Mag. Nat. Hist.* [2], XIX. pp. 106, 107. 1857.

(On the affinity of *Cumæ* with young *Macroura*.)

On *Praniza* and *Ancus*, and their Affinity to each other. *Ann. Mag. Nat. Hist.* [3], II. pp. 165-172, Pl. VI., VII. 1858.

On the Development of Decapod Crustacea. *Phil. Trans. Roy. Soc. London*, CXLVIII. pp. 589-605, Pl. XL.-XLVI. 1859. (Received May 1, read June 18, 1857.)

(Development of *Carcinus Mænas*.)

On the Morphology of some *Amphipoda* of the Division *Hyperina*. *Ann. Mag. Nat. Hist.* [3], VIII. pp. 1-16, Pl. I., II. 1861.

(Young described.)

[Review of Fritz Müller's *Für Darwin*.] *Rec. Zoölog. Lit.* (1864), I. pp. 261-270. 1865.

[Review of Z. Gerbe's *Métamorphoses des Crustacés marins*.] *Rec. Zoölog. Lit.* (1865), II. pp. 321, 322. 1866.

Report of the Committee appointed to explore the Marine Fauna and Flora of the South Coast of Devon and Cornwall. No. 1. *Rep. Brit. Assoc. Adv. Sci. for 1865*. 1866.

(*Glaucothoe* the young of *Pagurus*, p. 53.)

Also published with title, *Carcinological Gleanings*, No. II., in *Ann. Mag. Nat. Hist.* [3], XVII. p. 26. 1866.

Carcinological Gleanings. No. III. *Ann. Mag. Nat. Hist.* [4], I. pp. 442-448, Pl. XXI. 1868.

(Believes *Alima* to be the second stage of *Squilla*. Young of *Uca*, see CUNNINGHAM, ROBERT O.)

Report of the Committee appointed to explore the Marine Fauna and Flora of the South Coast of Devon and Cornwall. No. 2. *Rep. Brit. Assoc. Adv. Sci. for 1867.* 1868.

(Larvæ of *Porcellana*, *Pagurus*, *Palinurus*, pp. 279-282, Pl. I., II.)

Also published with title, Carcinological Gleanings, No. IV., in *Ann. Mag. Nat. Hist.* [4], II. pp. 113-117, Pl. IX., X. 1868.

Fourth Report on the Fauna of South Devon. *Rep. Brit. Assoc. Adv. Sci. for 1872.* 1873.

(Observation on the development of *Homarus*, &c., p. 52.)

Report on the Present State of our Knowledge of the Crustacea. Parts I. and II. On the Homologies of the Dermal Skeleton. *Rep. Brit. Assoc. Adv. Sci. for 1875*, pp. 41-53, Pl. I., II. 1876. *Do. for 1876*, pp. 75-94, Pl. II., III. 1877.

(Remarks on development, *passim*.)

On the Nauplius Stage of Prawns. *Ann. Mag. Nat. Hist.* [5], II. pp. 79-85. 1878.

(Thinks Fritz Müller's "*Peneus-nauplius*" may be a larval Schizopod or parasitic Suctorian. Larva of *Galatea* noticed, p. 82.)

Report on the Present State of our Knowledge of the Crustacea. Part IV. On Development. *Rep. Brit. Assoc. Adv. Sci. for 1878*, pp. 193-209, Pl. V.-VII. 1879.

(*Gelasimus*, *Trapezia*, *Dromia*, *Porcellana*, *Galatea*, *Astacus*, *Crangon*, *Palæmon*, &c.)

Report on the Present State of our Knowledge of the Crustacea. Part V. On Fecundation, Respiration, and the Green Gland. *Rep. Brit. Assoc. Adv. Sci. for 1880*, pp. 230-241. 1880.

(Account of recent observations of CHANTRAN, GERBE, WILLEMOES-SUHM, &c.)

On the *Peneidea*. *Ann. Mag. Nat. Hist.* [5], VIII. pp. 169-196, Pl. XI., XII. 1881.

(Genus *Euphema* M. Edw. a young form of *Peneus*? p. 192.)

Bate (C. Spence) and Müller (Fritz).

The Nauplius Stage of Prawns. *Ann. Mag. Nat. Hist.* [5], II. pp. 426, 427. 1878.

Bate, C. Spence [and Power, Wilmot Henry].

On the Development of the Crustacean Embryo, and the Variations of Form exhibited in the Larvæ of thirty-eight Genera of Podophthalmia. *Proc. Roy. Soc. London*, XXIV. pp. 375-379. 1876. *Ann. Mag. Nat. Hist.* [4], XVIII. pp. 174-177. 1876.

Bate (C. Spence) and Westwood (J. O.).

A History of the British Sessile-eyed Crustacea. 2 vols. London, 1861-1868. lvi. + 507 + 536 pp.

(Observations on development, pp. xliii.-xli., 1868 (C. S. Bate), *et passim*.)

Bell, Thomas.

A History of the British Stalk-eyed Crustacea. London, 1853. lxxv. + 386 pp.
(Metamorphosis, pp. xxxviii.-lxi., *et passim.*)

Beneden. See **Van Beneden.**

Bessels, Emil.

Einige Worte über die Entwicklungsgeschichte und den morphologischen
Werth des kugelförmigen Organes der Amphipoden. *Jenaische Zeitschr.*,
V. pp. 91-101. 1870.

See also **Van Beneden, Édouard.**

Birge, Edward A.

Notes on *Cladocera*. *Trans. Wisconsin Acad. Sci., Arts, & Letters*, IV. pp. 77-
112, Pl. I., II. 1878.

(Some notes on young, *passim.*)

Boas, J. E. V.

Amphion und *Polycheles* (*Willemoesia*). *Zoolog. Anzeig.*, II. pp. 256-259.
May, 1879.

(*Amphion* the larva of *Polycheles*?)

Studier over Decapodernes Slægtskabsforhold. Avec un Résumé en français.
K. Danske Vidensk. Selsk. Skr. [6], *naturvidensk. og mathemat. Afd.* I.
pp. 25-210, 7 pl. 1880.

Abstr. in *Journ. Roy. Microscop. Soc.* [2], I. pp. 450-452. 1881.

(Development, *passim.*)

Bobretzky, N.

K Embriologii Tshlenistonogikh [On the Embryology of Arthropods].
Zapiski Kiefskaro Obshtchestva Yestestvoispytatel'ei, III., 1873. [*Mem.*
Kieff Naturalists' Soc., III. pp. 129-263, Pl. I.-VI. 1873.]

Abstr. in German by HOYER in *Hofmann u. Schwalbe's Jahresberichte*,
II. pp. 31-2318. 1875.

(*Astacus* and *Palæmon*.)

Zur Embryologie des *Oniscus murarius*. *Zeitschr. f. wissenschaft. Zool.*, XXIV.
pp. 179-203, Taf. XXI., XXII. 1874.

Boeck, Axel.

*Om det norske Hummerfiski og dets Historie. *Tidsskrift for Fiskeri*, Kjø-
benhavn, 3^{die} Aargang, pp. 28-43, 1868; pp. 145-189, 1869.

Translated in *United States Commission of Fish and Fisheries*, Part III.
Report of the Commissioner for 1873-74 and 1874-75, pp. 223-258. 1876.

(Observations on development of *Homarus*, pp. 226, 227.)

Bosc, L. A. G.

Histoire Naturelle des Crustacés. Paris, 1802.

(Genus *Zoëa* founded for reception of the Brachyuran larva described by
SLABBER under the name of *Monoculus taurus*.)

Bovallius, Carl.

Embryologiska Studier. I. Om Balanidernas Utveckling. Stockholm, 1875.
44 pp., 5 pl.

Brandt, Eduard.

Ueber die Jungen der gemeinen Klappenassel (*Idothea entomon*). *Bull. Acad. Impér. des Sci. de St.-Pétersbourg*, XV. pp. 403-409 (*Mélanges Biologiques*, VII. pp. 649-657), 1 pl. 1870.

Brauer, Friedrich.

Beiträge zur Kenntniss der Phyllopoden. *Sitzungsber. d. kais. Akad. d. Wissensch. Wien. Math.-naturw. Cl.*, LXV. pp. 279-291. 1872.

Abstr. *Anzeiger d. Akad. d. Wissensch. Wien*, May 31, 1872, p. 100.
Ann. Mag. Nat. Hist. [1], X. p. 152, 1872. **Zeitschr. gesamt. Naturwissen.* [2], VI. pp. 314, 315, 1872.

(Parthenogenesis of *Apus*, &c.)

Vorläufige Mittheilungen über die Entwicklung und Lebensweise des *Lepidurus productus* Bosc. *Sitzungsber. d. kais. Akad. d. Wissensch. Wien. Math.-naturw. Cl.*, LXIX., I. Abt. pp. 130-140, Taf. I., II. 1874.

Bree, W. T.

Ecdysis, or the Casting of the Skin or Shell, in Crustaceous Animals. *Mag. Nat. Hist. (Loudon's)*, VIII. pp. 463, 469. August, 1835.

(*Astacus* hatched in the adult form.)

Brightwell, T.

Description of the Young of the Common Lobster, with Observations relative to the Questions of the Occurrence and Non-occurrence of Transformations in Crustaceous Animals. *Mag. Nat. Hist. (Loudon's)*, VIII. pp. 482-486. September, 1835.

(*Homarus*, *Astacus*.)

Brooks, W. K.

The Larval Stages of *Squilla Empusa* Say. *Chesapeake Zoölogical Laboratory. Scientific Results of the Session of 1878*, pp. 143-170, Pl. IX.-XIII. February, 1879.

Also published as *Studies from the Biological Laboratory of Johns Hopkins University*, I. Part 3.

The Rhythmical Character of the Process of Segmentation. *Amer. Journ. Sci. & Arts* [3], XX. p. 293. October, 1880.

(Observed in eggs of *Lucifer*.)

The Young of the Crustacean *Lucifer*, a Nauplius. *Amer. Naturalist*, XIV. pp. 806-808. November, 1880.

(Also records obs. of E. B. WILSON that zoëa of *Libinia* has full number of thoracic appendages when it leaves egg. WILSON has also raised zoëæ from eggs of *Porcellana*, *Pinniza*, *Sesarma*, *Pinnotheres*, and *Callinectes*.)

The Embryology and Metamorphosis of the *Sergestidae*. *Zoolog. Anzeig.*, III. pp. 563-567, 15 Nov., 1880.

Also brief notice in *Fifth Annual Report of the Johns Hopkins University, Baltimore, Maryland, 1880*, Appendix F, "Report of Chesapeake Zoölogical Laboratory for the Third Year, Summer of 1880, Beaufort, N. C.," p. 57. 1880.

(*Lucifer, Acetes?*)

Lucifer: a Study in Morphology. (Abstract.) *Proc. Roy. Soc. London*, No. 212, 1881. 3 pp.

(Development of *Lucifer, Acetes?*)

Brooks (W. K.) and Wilson (E. B.).

The First Zoëa of Porcellana. *Studies from the Biological Laboratory of Johns Hopkins University*, II. No. 1, pp. 58-64, Pl. VI., VII. 1881.

Buchholz, Reinhold.

Ueber *Hemioniscus*, eine neue Gattung parasitischer Isopoden. *Zeitschr. f. wissenschaft. Zool.*, XVI. pp. 303-327, Taf. XVI., XVII. 1866.

Beiträge zur Kenntniss der innerhalb der Ascidien lebenden parasitischen Crustaceen des Mittelmeeres. *Zeitschr. f. wissenschaft. Zool.*, XIX. pp. 99-155, Taf. V.-XI. 1869.

(Figures nauplii of several *Notodelphyidæ*.)

See also Münter, Jul.

Bullar, J. F.

On the Development of the Parasitic *Isopoda*. *Phil. Trans. Roy. Soc. London*, CLXIX. pp. 505-521, Pl. XLV.-XLVII. 1878. Abstr. in *Proc. Roy. Soc. London*, XXVII. pp. 284-286. April 4, 1878.

(*Cymothoë*.)

Burmeister, Hermann.

Beiträge zur Naturgeschichte der Rankenfüsser (*Cirripedia*). Berlin, 1834. viii. + 60 pp., 2 pl.

(Development, pp. 12-27, Pl. I.)

Cane. See DuCane.

Carbonnier, Pierre.

L'Écrevisse. Mœurs — Reproduction — Education. Paris, 1869. 197 pp.

(Notes on hatching and young, Ch. VI. pp. 49-56.)

Cavolini, Filippo.

*Memoria sulla Generazione dei Pesci e dei Granchi. Napoli, 1787.

Germ. transl. by E. A. W. ZIMMERMANN. Abhandlung über die Erzeugung der Fische und der Krebse. Berlin, 1792. 192 pp., 3 pl.

(Zoëa of *Brachyura* [*Grapsus varius?*], young of *Eutoniscus*, *Rhizocephala*, &c.)

Chantran, Samuel.

Observations sur l'Histoire Naturelle des Écrevisses. *Comptes Rendus de l'Acad. des Sci., Paris*, LXXI. pp. 43-45. 1870

Trans. in *Ann. Mag. Nat. Hist.* [4], VI. pp. 265-267. 1870. *Journ. de l'Anat. et de la Physiol.* (Robin's), VIII. pp. 236-238. 1872. *Rev. Mag. Zool.* [2], XXIII. pp. 75-78. 1871-72.

Nouvelles Observations sur le Développement des Écrevisses. *Comptes Rendus de l'Acad. des Sci., Paris*, LXXIII. pp. 220, 221. 1871.

Trans. in *Ann. Mag. Nat. Hist.* [4], VIII. pp. 219, 220. 1871. *Journ. de l'Anat. et de la Physiol.* (Robin's), VIII. p. 238. 1872. *Rev. Mag. Zool.* [2], XXIII. pp. 78, 79. 1871-72.

Claparède, A. René Edouard.

Beobachtungen über Anatomie und Entwicklungsgeschichte wirbelloser Thiere an der Küste von Normandie angestellt. Leipzig, 1863. viii. + 120 pp., 18 pl.

(Development of *Mysis*, pp. 92-94, Pl. XVII. figs. 1-6; *Lepas anatifera*, pp. 98-101, Pl. XVII. figs. 15-26; *Phoxichilidium*, pp. 104, 105, Pl. XVIII. figs. 13, 14.)

Claus, Carl.

Ueber den Bau und die Entwicklung parasitischer Crustaceen. Cassel, 1858. 34 pp., 2 pl.

(*Chondracanthus*, *Lernanthropus*, *Kroyeria*.)

Zur Anatomie und Entwicklungsgeschichte der Copepoden. *Arch. f. Naturgesch.*, XXIV. 1, pp. 1-76, Taf. I.-III. 1858.

*Zur Kenntniss der Malacostracenlarven. *Würzburg. naturwiss. Zeitschr.*, II. pp. 23-46. 1861.

Ueber die morphologischen Beziehungen der Copepoden zu den verwandten Crustaceengruppen der Malacostraken, Phyllopoden, Cirripeden und Ostracoden. *Würzburg. naturwiss. Zeitschr.*, III. pp. 159-167. 1862.

Ueber den Bau und die Entwicklung von *Achtheres percarum*. *Zeitschr. f. wissenschaft. Zool.*, XI. pp. 287-308, Taf. XXIII., XXIV. 1862.

Die frei lebenden Copepoden mit besonderer Berücksichtigung der Fauna Deutschlands, der Nordsee und des Mittelmeeres. Leipzig, 1863. x. + 230 pp., 37 pl.

(Development, pp. 72-83. Figures several nauplii.)

Ueber einige Schizopoden und niedere Malacostraken Messina's. *Zeitschr. f. wissenschaft. Zool.*, XIII. pp. 422-454, Taf. XXV.-XXIX. 1863.

(Development of *Palinurus*, *Sergestes*, *Euphausia*.)

Zur näheren Kenntniss der Jugendformen von *Cypris ovum*. *Zeitschr. f. wissenschaft. Zool.*, XV. pp. 391-398, Taf. XXVIII., XXIX. 1865.

Abstr. by C. SPENCE BATE in *Rec. Zool. Lit.* (1865), II. pp. 344, 345. 1866.

Die Copepoden-Fauna von Nizza. Ein Beitrag zur Charakteristik der Formen und deren Abänderungen "im Sinne Darwin's." *Schriften d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, IX. Suppl. 1. 34 pp., 5 pl. 1866.

(Young *Calanella*, p. 9, Taf. V. fig. 22. *Calanus mastigophorus?* pp. 10, 11, Taf. V. figs. 20, 21.)

Ueber *Lernaeocera esocina* v. Nordm. (Vorläufige Mittheilung.) *Sitzungsber. d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, 1867, pp. 5-12.

(Development, pp. 11, 12.)

Ueber den Entwicklungsmodus der *Porcellana*-Larven im Vergleiche zu den Larven von *Pagurus*. *Sitzungsber. der Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, 1867, pp. 12-16.

Ueber die Metamorphose und systematische Stellung der Lernaeen. *Sitzungsber. d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, 1868, pp. 5-13.

Beiträge zur Kenntniss der Ostracoden. I. Entwicklungsgeschichte von *Cypris*. *Schriften d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, IX. pp. 151-166, 2 pl. 1868.

Abstr. in *Ann. Mag. Nat. Hist.* [4], IV. pp. 291, 292. 1869. **Arch. Sci. Phys.*, XXXV. pp. 312-314. 1869.

Beobachtungen über *Lernaeocera*, *Peniculus* und *Lernaea*. Ein Beitrag zur Naturgeschichte der Lernaeen. *Schriften d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, IX. Suppl. 2. 32 pp., 4 pl. 1868.

(Young of *Lernaeocera esocina*. Metamorphosis of *Lernaea branchialis*, pp. 16-27, Taf. IV.)

Die *Cypris*-ähnliche Larve (Puppe) der Cirripeden und ihre Verwandlung in das festsitzende Thier. Ein Beitrag zur Morphologie der Rankenfüssler. *Schriften d. Gesell. zur Beförderung d. gesamt. Naturwissen. zu Marburg*, IX. Suppl. 5. 17 pp., 2 pl. 1869.

Die Metamorphose der Squilliden. *Nachrichten Kön. Gesell. Wissensch. Göttingen*, 1871, pp. 169-180. (Abstract.) *Abh. Kön. Gesell. Wissensch. Göttingen*, XVI. pp. 111-163, Taf. I.-VIII. 1871. (Full memoir.)

Zur Kenntniss des Bau's und der Entwicklung von *Apus* und *Branchipus*. *Nachrichten Kön. Gesell. Wissensch. Göttingen*, 1872, pp. 209-225. **Zeitschr. gesamt. Naturwissen.*, VI. pp. 200, 201. 1872.

Zur Kenntniss des Baues und der Entwicklung von *Branchipus stagnalis* und *Apus cancriformis*. *Abh. Kön. Gesell. Wissensch. Göttingen*, XVIII. pp. 93-140, Taf. I.-VIII. 1873.

Ueber die Entwicklung, Organisation und systematische Stellung der Arguliden. *Zeitschr. f. wissenschaft. Zool.*, XXV., pp. 217-284, Taf. XIV.-XVIII. 1875.

*Das System der Crustaceen im Lichte der Descendenzlehre. I. Die Metamorphose der Malakostraken. Wien, 1875.

Zur Kenntniss der Organisation und des feinern Baues der Daphniden und verwandter Cladoceren. *Zeitschr. f. wissenschaft. Zool.*, XXVII. pp. 362-402, Taf. XXV.-XXVIII. Aug., 1876.

(Structure of ovary, eggs, &c., pp. 389-399, Taf. XXVII. figs. 15-20.)

Grundzüge der Zoologie. Zum Gebrauche an Universitäten und höheren Lehranstalten sowie zum Selbststudium. 3te Aufl. Marburg und Leipzig, 1874, 1876. xii. + 1254 pp.

(Development of Crustacea, pp. 450-562, *passim*. 1876.)

Untersuchungen zur Erforschung der Genealogischen Grundlage des Crustaceen-Systems. Ein Beitrag zur Descendenzlehre. Wien, 1876. viii. + 114 pp., 19 pl.

Noticed by EDUARD VON MARTENS in *Zoölog. Rec.* (1876), XIII. *Crust.*, pp. 2, 3. 1878.

(General work on development of Crustacea.)

Neue Beiträge zur Kenntniss der Copepoden unter besonderer Berücksichtigung der Triester Fauna. *Arbeiten aus d. zoolog. Inst. d. Universität Wien u. d. zoolog. Station in Triest*, III. pp. 313-332, Taf. XXI. - XXV. 1881.

(Young males of certain species resemble the female in the segmentation of the antennæ, &c.)

Coldstream, John.

On the Structure and Habits of the *Limnoria terebrans*, a minute Crustaceous Animal, destructive to marine wooden Erections, as Piers, &c. *Edinburgh New Philosoph. Journ.*, XVI. pp. 316-334, Pl. VI. 1834.

(Young, p. 325, Pl. VI. figs. 17, 18.)

Cornalia (Emilio) and Panceri (Paolo).

Osservazioni zoologico-anatomiche sopra un nuovo Genere di Crostacei Isopodi sedentarii (*Gyge branchialis*). *Memorie della Reale Accad. d. Scienze di Torino*, [2], XIX. 1858. 36 pp., 2 pl.

(Development, pp. 21-2., Pl. I. figs. 6-25.)

Costa, Oronzio-Gabriele.

Fauna del Regno di Napoli, &c. Napoli, 1829, *et seqq.*

(Embryo of *Callianassa subterranea*, Decapodi Macrouri, Tav. Ibis, fig. 2, pp. 9, 10. Feb. 1847.)

A few plates are missing from the copy of this work in the library of the Museum of Comparative Zoölogy. According to Leuckart, *Arch. f. Naturgesch.*, 1859, 1, p. 246, the embryo of *Notopterophorus* is figured.

Coste [P.].

Note sur la Larve des Langoustes. *Comptes Rendus de l'Acad. des Sci., Paris*, XLVI. pp. 547, 548. 1858. *Ann. Mag. Nat. Hist.* [3], I. p. 466. 1858.

(*Phyllosoma* the larva of *Palinurus*.)

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Trans. in *Ann. Mag. Nat. Hist.* [3], II. pp. 197-202. 1858.

Couch, R. Q.

On the Metamorphoses of the Decapod Crustaceans. *The Eleventh Annual Report of the Royal Cornwall Polytechnic Society, 1843*, pp. 28-43, Pl. I. Falmouth.

(*Carcinus Mænas*, *Portunus plicatus*, *Cancer pagurus*, *Maia verrucosa*, *Inachus dorynchus*, *Pisa Gibbsii*, *Homarus vulgaris*, *Palinurus vulgaris*, *Galatea squamifera*.

Xantho floridus, *X. rivulosus*, *Pilumnus hirtellus*, *Polybius Henslowii*, *Portunus puber*, and several others hatched as zoëæ.)

See BELL's *Hist. Brit. Stalk-eyed Crustacea*. London, 1853.

On the Metamorphosis of the Crustaceans, including the *Decapoda*, *Entomostraca*, and *Pycnogonidæ*. *The Twelfth Annual Report of the Royal Cornwall Polytechnic Society, 1844*, pp. 17-46, Pl. I. Falmouth.

(*Carcinus Mænas*, *Palinurus vulgaris*, *Homarus vulgaris*, *Crangon vulgaris*, *Palæmon serratus*, *Porcellana platycheles*, *Cyclops quadricornis*, *Orithyia coccinea*, *Nymphon gracile*.)

See BELL's *Hist. Brit. Stalk-eyed Crustacea*. London, 1853.

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(Larva referred to *Phyllosoma* by GERSTAECKER, *Arch. f. Naturgesch.* 1858, 2, p. 455.)

Cunningham, Robert O.

[Letter to C. Spence Bate,] Carcinological Gleanings, No. III., *Ann. Mag. Nat. Hist.* [4], I. pp. 442-446. 1868.

(*Uca Cunninghami* Bate with live, fully developed young ones under the pleon.)

Czerniavsky. See Tscherniawsky.

Dana, James D.

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(*Passim*.)

Danielssen [D. C.]. See Koren, J.

Darwin, Charles.

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(Metamorphoses, pp. 8-28.)

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(Metamorphoses, pp. 102-133.)

De Filippi. *See* Filippi.

De Geer. *See* Geer.

De La Valette St. George. *See* La Valette St. George.

Dohrn, Anton.

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(*Scyllarus arctus*, *Palinurus vulgaris*.)

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(*Cirripedia*.)

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(*Amphion*, *Lophogaster*, *Portunus*, *Pandalus*, *Galatea*, *Elaphocaris*.)

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(Zoëæ, pp. 372-378, Taf. XXIX., XXX.)

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(*Palæmon*, *Crangon*.)

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(*Carcinus Mænas*.)

Dujardin, Félix.

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Duthiers. See Lacaze-Duthiers.

Edwards. See Milne Edwards.

Erdl, M. P.

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(Plate II. figs. 1-10, *Carcinus Mænas* in ovo.)

Eschscholtz, Fr.

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(*Lonchophorus anceps*, col. 734, Taf. V. fig. 1, described as a Macrouran, is a Brachyuran zoëa, described by A. Dohrn, *Zeitschr. f. wissensch. Zool.*, XXI. p. 373, Taf. XXX. fig. 52, 1871, and by Claus, under the name of *Pluteocaris*, "Untersuchungen," &c., p. 65, Taf. XII. figs. 1-7, 1876.)

Faxon, Walter.

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(Includes notice of schizopod stage of *Virbius zostericola*, p. 322.)

On some Points in the Structure of the Embryonic Zoëa. *Bull. Mus. Comp. Zoöl. at Harvard Coll., in Cambridge*, VI. pp. 159-166, 2 pl. Oct. 19, 1880.

(*Carcinus Mænas*, *Panopeus Sayi*, *Gelasimus pugnax*.)

Filippi, F. de.

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(Development, pp. 200-203, Tav. XII., XIII. figs. 10, 11.)

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(Young *Cypris*, pp. 643, 644, Taf. XIX. figs. 7, 8.)

Fraisse, Paul.

Die Gattung *Cryptoniscus* Fr. Müller (*Liriope* Ratlike). *Arbeit. aus dem zool.-zootom. Inst. in Würzburg*, IV. pp. 239-296, Taf. XII.-XV. 1878.

(Includes development. Nauplius of *Peltogaster Rodriguezii*, Taf. XV. fig. 57.)

Antoniscus Carolinii n. Sp., nebst Bemerkungen über die Umwandlung und Systematik der Bopyriden. *Arbeit. aus dem zool.-zootom. Inst. in Würzburg*, IV. pp. 382-440, Taf. XX., XXI. 1878.

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Friö. See Fritsch.

Fritsch, Anton.

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Germ. transl. by J. A. E. GOEZE. Abhandlungen zur Geschichte der Insekten. Bd. VII. Nürnberg, 1783. Pp. 164-181, Pl. XXVII.-XXX.

(Larvæ of *Cludocera*, *Copepoda*, *passim*.)

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(Egg of *Sacculina*.)

Gerbe, Z.

Métamorphoses des Crustacés marins. *Comptes Rendus de l'Acad. des Sci., Paris*, LIX. pp. 1101-1103. 1864. *Rev. Mag. Zool.* [2], XVII. pp. 79-83. 1865. *Ann. Mag. Nat. Hist.* [3], XV. pp. 237, 238. 1865.

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(*Phyllosoma* the young of *Palinurus*. Embryonic skin with invaginated spines in numerous genera.)

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(Internal structure of *Phyllosoma* and other larvæ.)

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(*Porcellana, Homarus, Phyllosoma, Nymphon*, &c.)

Métamorphose des Crustacés marins. Quatrième Note. *Comptes Rendus de l'Acad. des Sci., Paris*, LXII. pp. 1024-1027. May 7, 1866. *Ann. Mag. Nat. Hist.* [3], XVIII. pp. 69-71. July, 1866.

(Conclusions from observations recorded in three preceding notes.)

Gerstaecker, A.

Bericht über die wissenschaftlichen Leistungen im Gebiete der Entomologie während des Jahres 1857. *Arch. f. Naturgesch.* 1858, 2, p. 455.

(Larva of *Palinurus*, described by R. Q. COUCH (*Nat. Hist. Rev.* IV., *Rep. Brit. Assoc. Adv. Sci. for 1857*), referred to *Phyllosoma*.)

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(Development, *passim*.)

[On *Ornitholepas australis* Targ. Tozz.] *Sitz.-Ber. Gesell. naturf. Freunde zu Berlin*, 1875, pp. 113-115.

(An immature form. See AD. TARGIONI TOZZETTI, *Bull. Soc. Entomol. Italiana*, IV. pp. 84-96, Tav. I. 1872.)

Giard, Alfred.

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(Nauplius of *Ophioseides apoda*, Pl. XIX. fig. 2.)

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(“Nauplius-eye” in embryo.)

Notes pour servir à l'Histoire du Genre *Entoniscus*. *Journ. de l'Anat. et de la Physiol. (Robin et Pouchet's)*, XIV. pp. 675-700, Pl. XLVI. 1878.

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(Development, pp. 693-698. On the eye of *Cypris*-larva of *Cirripedia*, p. 695, foot-note.)

On the Nauplius and Pupa Stage of *Suctorina*. *Ann. Mag. Nat. Hist.* [5], II. pp. 233, 234. Sept. 1878.

(Fritz Müller's “*Peneus*-nauplius” not a larval Suctorian.)

Gissler, Charles F.

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(Young of *Cyclops* and *Cypris*.)

Goodsir, Henry D. S.

On a New Genus, and on Six New Species of Crustacea, with Observations on the Development of the Egg, and on the Metamorphoses of *Caligus*, *Carcinus*, and *Pagurus*. *Edinburgh New Philosoph. Journ.*, XXXIII. pp. 174-192, Pl. II., III. 1842.

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(Young of *Hyperia* [?], p. 368, Pl. XXII. fig. 15.)

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(Development of *Balanus*, pp. 115-118, Pl. III., IV. Last zoëa stage and first megalopa stage of *Galatea* [*Porcellana* ?], pp. 169-172, Pl. VII., VIII.; also brief notice in *A Year at the Shore*, p. 194, London, 1865.)

Gray [J. E.].

Reproduction of *Cirrhipeda*. *Proc. Zoölog. Soc. London*, Pt. I. pp. 115, 116. 1833.

(*Balanus Cranchii*.)

Grobben, Carl.

Die Entwicklungsgeschichte der *Moina rectirostris*. Zugleich ein Beitrag zur Kenntniss der Anatomie der Phyllopoden. *Arbeiten aus d. zoolog. Inst. d. Universität Wien u. d. zoolog. Station in Triest*, II. pp. 203-268, Taf. XI.-XVII. 1879.

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(Also contains observations on larva of *Cyclops* and *Ergasilus*.)

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(Also contains observations on the formation of the mesoderm in *Phyllopoda* and *Cirrhipedia*, pp. 29-31.)

Grube, Adolph Eduard.

Bemerkungen über die Phyllopoden, nebst einer Uebersicht ihrer Gattungen und Arten. *Arch. f. Naturgesch.*, 1853, 1, pp. 71-172, Taf. V.-VIII.

(Observations on development, *passim*.)

Guérin-Ménéville, Felix Eduard.

*IN RAMON DE LA SAGRA'S *Historia Física, Política, y Natural de la Isla de Cuba. II. Parte, Historia Natural*, VII. p. xx. ff., Tab. III. Paris, 1856.

Guilding, L.

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(Young of "mountain crab" [?] "leave the egg perfect.")

Cf. BELL'S *Hist. Brit. Stalk-eyed Crustacea*, Intro., p. xlv. London, 1853.

Haeckel, Ernst.

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Hailstone, S.

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Hailstone (S.) and Westwood (J. O.).

Descriptions of some Species of Crustaceous Animals, by S. HAILSTONE, JR., Esq.: with Illustrations and Remarks, by J. O. WESTWOOD, Esq., F.L.S., etc. *Mag. Nat. Hist. (London's)*, VIII. pp. 261-276. May, 1835.

(Young of several *Decapoda*.)

Hartmann, Robert.

Beiträge zur anatomische Kenntniss der Schmarotzer-Krebse. 2. *Lernaeocera Barnimii* Mihi. *Arch. f. Anat., Physiol. u. wissenschaft. Med.*, 1870, pp. 726-752, Taf. XVII., XVIII.

(Development, p. 749, Taf. XVIII. figs. 21-28.)

Hartog, Marcus. See Addendum, p. 244.**Haswell, William A.**

Note on the Phyllosoma Stage of *Ibacus Peronii* Leach. *Proc. Linn. Soc. New South Wales*, IV. pp. 280-282. 1879.

Henneguy, L. F.

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(Seen in ovum of *Asellus aquaticus*.)

Hensen, V.

Studien über das Gehörorgan der Decapoden. *Zeitschr. f. wissenschaft. Zool.*, XIII. pp. 319-412, Taf. XIX.-XXII. 1863.

(Auditory apparatus of zoëa of *Carcinus Maenas*, pp. 340, 362, Taf. XX. fig. 25.)

Herrick, C. L.

Microscopic *Entomostraca*. *Geolog. & Nat. Hist. Survey of Minnesota, 7th Ann. Rep. for the Year 1878*, pp. 81-123, Pl. I.-XXI. 1879.

(Nauplii, *passim*.)

Hesse, Eugène.

Mémoire sur les Pranizes et les Ancées. *Ann. Sci. Nat.* [4], Zool., IX. pp. 93-119. 1858.

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(Parasitic Copepoda.)

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Mémoire sur les Métamorphoses que subissent pendant la Période Embryonnaire les Anatifes appelés Scalpels Obliques. *Ann. Sci. Nat.* [4], Zool., XI. pp. 160-178, 1859. Short Notice in *Comptes Rendus de l'Acad. des Sci., Paris*, XLVIII. p. 911. 1859.

(See later paper in *Revue des Sci. Nat.*)

Mémoire sur deux nouveaux Genres de l'Ordre des Crustacés Isopodes Sédentaires et sur les Espèces Types de ces Genres. *Ann. Sci. Nat.* [4], Zool., XV. pp. 91-116, Pl. VIII., IX. 1861.

(Development of *Athelgue*, pp. 100-102, Pl. VIII. figs. 2h-2k.)

Observations sur des Crustacés rares ou nouveaux des Côtes de France.

1^{er} Art. Du Coiliacole sétigère (Nobis), *Coiliacola setigera*. *Ann. Sci. Nat.* [4], Zool., XVIII. pp. 343-355, Pl. XVIII. 1862.

(Few observations on development.)

Recherches sur quelques Crustacés rares ou nouveaux des Côtes de France.

2^e Mémoire. De la Lernée branchiale et de celle qui vit sur le Gade barbu.

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9^e Art. Recherches sur les Genres *Doropygus* et *Dyspontius* de M. Thorell. Description de quatre nouveaux Genres: *Gastrode*, *Cheratriehode*, *Ophthalmopache* et *Platydurax* (Nobis). *Ann. Sci. Nat.* [5], Zool., VI. pp. 51-87, Pl. IV. 1866.

(Young of *Doropygus*, a parasite of Ascidians, pp. 57, 65.)

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14^e Art. Description de deux *Sacculinidiens*, d'un *Peltogastre*, d'un *Polychliniophile* et de deux *Cryptopodes* nouveaux. *Ann. Sci. Nat.* [5], Zool., VIII. pp. 377-381, 1867; IX. pp. 53-61, 1868.

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(Young, pp. 108, 109, figs. 4, 5.)

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(Embryo of *Cuma terginigra*, pp. 353, 354, fig. 19.)

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(Observations on young, *passim*.)

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(*Trichodactylus* leaves the egg in the perfect form, p. 152.)

See also Bate, C. Spence.

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(Development, pp. 75-82.)

Power, Wilmot Henry. See Bate, C. Spence.

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(Young, pp. 214-220, Pl. XX., XXI.)

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(Observations of Professor RASCH on young *Homarus*. pp. 268, 269.)

Rathke, Heinrich.

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(*Lernæopoda*, *Bopyrus*, *Idothea*, *Ligia*, *Janira*, *Amphithoe*, *Gammarus*, *Crangon*, *Palaemon*, *Eriphia*, *Carcinus*.)

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(This is an abstract of the observations published in *Reisebemerkungen aus Skandinavien*, &c.)

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(*Homarus*, *Pagurus*, *Galatea*, *Hyas*.)

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Descrizione di due Specie Nuove di *Lernænicus* Les., con Osservazioni intorno a questo ed ai Generi *Lernæocera* Bl., e *Lernæonema* M. Edw. *Atti della Soc. Toscana di Scienze Nat.*, III. Tav. VII. 1877.

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Richters, Ferd.

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(Young of *Astacus*, p. 337; *Gammarus*, p. 353.)

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(Observations on young.)

Saint George. See La Valette St. George.

Saint-Hilaire. See Geoffroy Saint-Hilaire.

Salensky, W.

Sphaeronalla Leuckarti, ein neuer Schmarotzerkrebs. *Arch. f. Naturgesch.* 1868, 1, pp. 301-322, Taf. X.

(Gives account of development. Parasitic Copepod.)

Sars, Georg Ossian.

Norges Ferskvandskrebssdyr. Første Afsnit *Branchiopoda*. I. *Cladocera Ctenopoda* (Fam. *Sididae* & *Holopedidae*). (Prisbelønnet Afhandling.) Christiania, 1865. viii. + 71 pp., 4 pl.

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Om en dimorph Udvikling samt Generationsvexel hos *Leptodora*. *Forhandl. Vidensk.-Selsk. Christiania*, Aar 1873, pp. 1-15, Tab. I. 1873.

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(Three larval stages of *Homarus vulgaris*.)

Sars, Michael.

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(Development, pp. iv, 21-25, Tab. III. figs. 57-65.)

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(Young of *Munnopsis typica* [I.], Pl. VII. figs. 137, 138; nauplius of *Melinnacheres ergasiloides*, II. p. 14, Pl. VIII. fig. 7; embryo and nauplius of *Anteatheres Duebenii*, pp. 26-28, Pl. X. figs. 35-37.)

Say, Thomas.

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Schäffer, Jacob Christian.

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Trans. in JURINE'S *Histoire des Monocles*, pp. 196, 197. Genève, 1820.

(Development of *Daphnia*, pp. 56 et seq., Pl. I. figs. 2, 3.)

*Der Krebsartige Kieffenfuss mit der kurzen und langen Schwanzklappe. Regensburg, 1756.

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(*Gecarcinus*, with direct development.)

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